

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. - 17. (Canceled).

18. (Previously Presented) A packet transfer device for controlling a transfer of a plurality of packets between a client and a destination, said packet transfer device comprising:

a DNS proxy unit for receiving a name resolution response message transmitted from a name resolution server to said client, said name resolution response message including an IP address corresponding to said destination and one or more packet transfer information fields, and for rewriting a routing table of said DNS proxy unit to include said IP address and said one or more packet transfer information fields,

wherein said DNS proxy unit is configured to control said transfer of the packets between said client and said destination according to said one or more packet transfer information fields,

wherein said one or more packet transfer information fields include at least one of a packet transfer priority field, a logical network identifier, and a logical channel identifier,

wherein said one or more packet transfer information fields include the packet transfer priority field,

wherein the packet transfer device further comprises a user information obtaining unit which obtains attribute information regarding a sender of a name resolution request message transmitted from said client to said name resolution server,

wherein said DNS proxy unit, upon receiving said name resolution request message, obtains said attribute information regarding the sender of said name resolution request message through said user information obtaining unit and transmits said name resolution request message with said attribute information added to said name resolution server, and

wherein said attribute information includes at least one of a login identifier of the sender, information identifying a geographic location of the sender, information identifying a type of a sender device used by the sender in sending the name resolution request message, and information identifying a type of a network coupling the sender device to the name resolution server.

19. (Canceled).

20. (Previously Presented) The packet transfer device as set forth in claim 18, wherein

in response to said name resolution response message, said DNS proxy unit deletes said one or more packet transfer information fields from said name resolution response message before transmitting said name resolution response message to said client.

21. -22. (Canceled).

23. (Previously Presented) The packet transfer device as set forth in claim 18, further comprising,

as an internal element, a user information database in which said attribute information is stored, wherein

said user information obtaining unit obtains said attribute information from said user information database.

24. (Previously Presented) The packet transfer device as set forth in claim 18, wherein

said user information obtaining unit obtains said attribute information from an external database server having a user information database in which said attribute information is stored.

25. (Original) The packet transfer device as set forth in claim 24, wherein said user information obtaining unit uses a name resolution request message in obtaining said attribute information from said external database server.

26. (Previously Presented) The packet transfer device as set forth in claim 24, wherein
said external database server is a name resolution server externally disposed.

27. (Previously Presented) The packet transfer device as set forth in claim 23, further comprising:
a user authentication unit which identifies and authenticates a user, and
a user information updating unit which updates the contents of said user information database based on attribute information regarding said user obtained at the time of authentication.

28 - 46. (Canceled).

47. (Previously Presented) A computer-readable storage medium storing computer-readable instructions, said computer-readable instructions configured to cause a computing device to:

perform a proxy function of receiving a name resolution response message transmitted from a name resolution server to a client, said name resolution response message including an IP address according to a destination and one or more packet transfer information fields, and rewriting a routing table to include said IP address and said one or more packet transfer information fields; and control a transfer of a plurality of packets between said client and said destination according to said one or more packet transfer information fields,

wherein said one or more packet transfer information fields include at least one of a packet transfer priority field, a logical network identifier, and a logical channel identifier,

wherein said one or more packet transfer information fields include the packet transfer priority field,

wherein said computer-readable instructions are further configured to cause the computing device to obtain attribute information regarding a sender of a name resolution request message transmitted from said client to said name resolution server and to transmit

said name resolution request message with said attribute information added to said name resolution server,

wherein said attribute information includes at least one of a login identifier of the sender, information indicating a geographic location of the sender, information indicating a type of a sender device used by the sender in sending the name resolution request message, and information indicating a type of a network coupling the sender device to the name resolution server.

48. (Canceled).

49. (Previously Presented) The computer-readable storage medium as set forth in claim 47, wherein said computer-readable instructions are further configured to cause the computing device to:

in response to said name resolution response message delete said one or more packet transfer information fields from said name resolution response message; and
transmit said name resolution response message to said client.

50. - 53. (Canceled).

54. (Previously Presented) A packet transfer method of transferring a plurality of packets between a client and a destination, said method comprising:

receiving a name resolution response message transmitted from a name resolution server to said client, said name resolution response message including an IP address corresponding to said destination and one or more packet transfer information fields;
rewriting a routing table to include said IP address and said one or more packet transfer information fields; and
controlling said transfer of said packets between said client and said destination according to said IP address and said one or more packet transfer information fields,

wherein said one or more packet transfer information fields include at least one of a packet transfer priority field, a logical network identifier, and a logical channel identifier,

wherein said one or more packet transfer information fields include the packet transfer priority field,

wherein said method further comprises:

obtaining attribute information regarding a sender of a name resolution request message transmitted from said client to said name resolution server; and

transmitting said name resolution request message with said attribute information added to said name resolution server, and

wherein said attribute information includes at least one of a login identifier of the sender, information indicating a geographic location of the sender, information indicating a type of a sender device used by the sender in sending the name resolution request message, and information indicating a type of a network coupling the sender device to the name resolution server.

55. – 59. (Canceled).